

# SOUTHERN TEXTILE BULLETIN

VOL. V

CHARLOTTE, N. C., AUGUST 21, 1913

NUMBER 25

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of  
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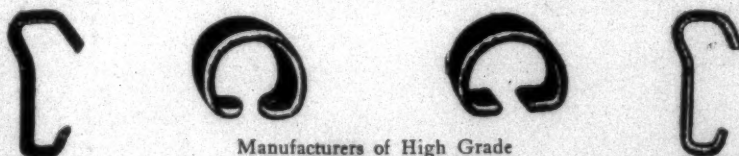
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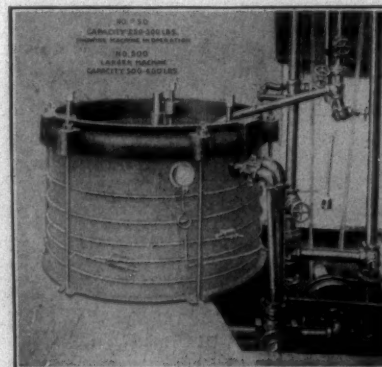
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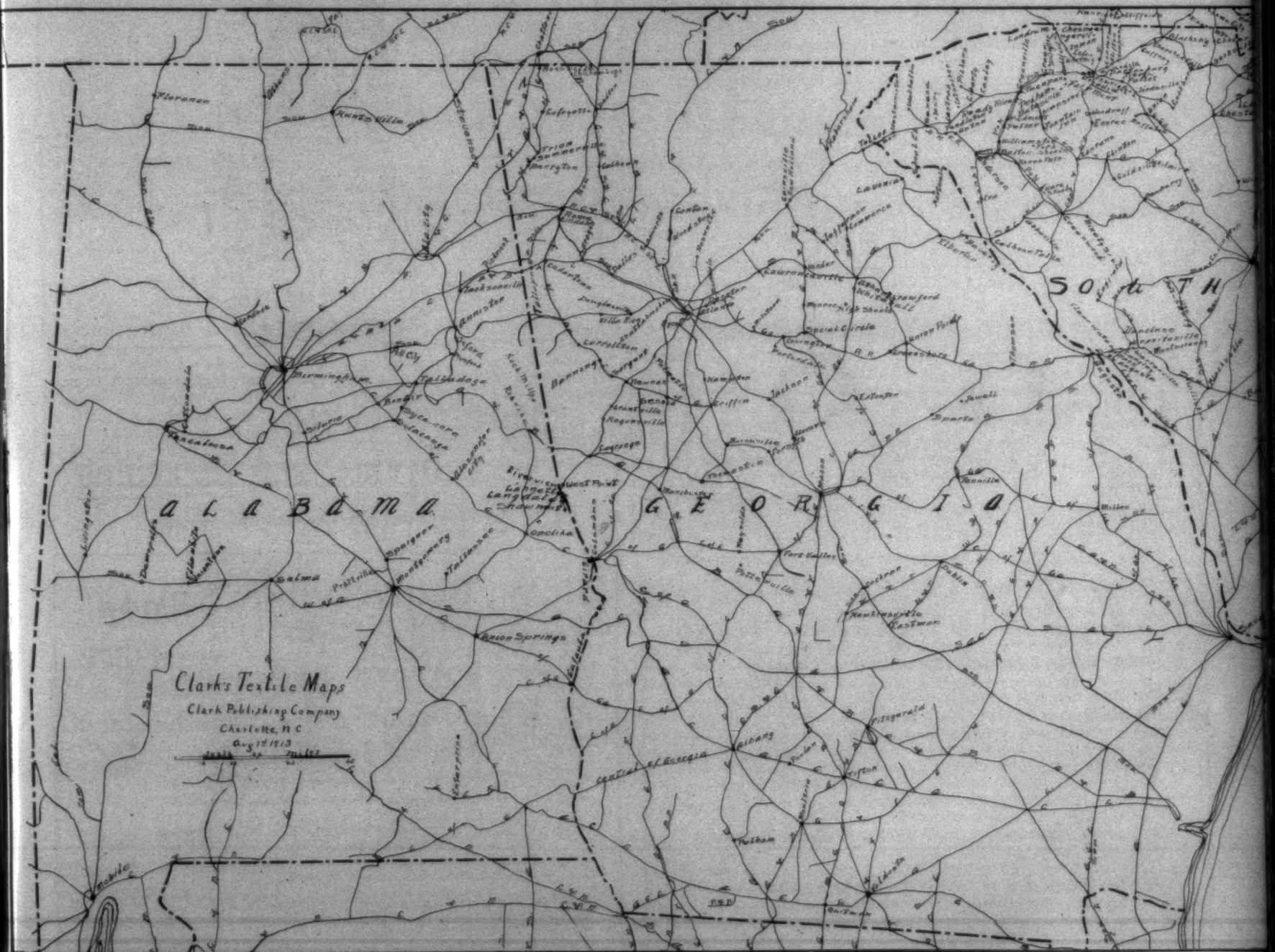


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*Textile Map of Georgia and Alabama*

(Map of North and South Carolina shown last week)



# High Efficiency of Spinning Rollers

**W**HENEVER a really good job is desirable it must be commenced properly; the foundation must be well laid, otherwise it will not be brought to a successful issue. If this has reference to anything at all, it most certainly has reference to the covering of draught spinning frame rollers. When one takes into consideration how important it is that spinning rollers should be always in good order no pains will be spared in performing every operation required for covering them in the best possible manner and with the best materials and with the best possible appliances.

The proper covering of rollers has been the subject which has exercised the brains of experienced and thoughtful men for generations. Some of these men have thought it possible to make rollers, which would do without covering, and many patents have been taken out for inventions having this end in view. The spinner of today is still using rollers covered with cloth and leather as used by his ancestors, feeling that he is quite safe, and leaving to posterity the finding out of a substitute, if such a thing be possible.

It is unnecessary to enlarge upon the delicate work a top roller has to perform; this is common knowledge, but it is necessary to enlarge upon the means of obtaining a long and efficient life for the spinning roller, so without further parley the attack shall be made, and all the best engines of war brought to bear upon the subject—the old-fashioned method will be discarded.

On the first covering the bare roller must be cleared of grease, and on re-covering from all paste as well. To accomplish this all rollers should be put into boiling water with a liberal supply of soda or any other substance which will attack and remove the grease and paste, lifted out while hot, and dried off in sawdust.

It is good practice to test the bare rollers occasionally with the testing appliance to be described later.

The importance of having cloth cannot be too strongly emphasized, and this also applies to the paste securing the cloth to the roller. It is also important that the knives for cutting the cloth should be kept sharp; the best edge for the knife is that given to it by an oil-stone, because it leaves a good, firm edge. If the cloth is torn instead of being cut to width the edges are not firm.

The pieces of cloth must be just long enough to go round the roller, with a beveled allowance for overlap, so as to obtain a perfectly even roller. This cannot be obtained with the mathematical exactness which is required by hand measuring and cutting, neither can the paste be evenly laid by hand. The best of us cannot do work with the precision of a machine; a properly constructed machine will perform its work correctly every time.

The pasting, measuring and cutting to length of roller cloth can be performed in one machine and the work done accurately in considerably less time than by hand with the old appliances. The machine is set to cut off the required length to go round the roller, and the action of the knife is such that beveled edges are given to the ends of the cloth so as to give a slight overlap without forming a ridge when put round the roller. The roll of cloth is placed in the machine and passes through a box containing paste to the measuring arrangement and cut off. The thickness of the layer of paste can be regulated to a nicety and is evenly pressed into the cloth, not simply laid on. When the cloth coming from this machine (the right length) is placed round the roller, a perfectly even foundation is the result; if this should not be so, the operator has not set the gauge properly. Instead of rolling the cloth-covered rollers on a flat board by hand, it is better to pass them through a calendaring machine without heat. This machine will be referred to again later.

When the cloth is satisfactorily secured to the roller, the next operation is to cover this foundation with leather. But the leather must be of even thickness before it is made into "hots." As every spinner knows, it is impossible to obtain a whole roller skin perfectly true in thickness. If "hots" are made from the skin as it comes from the tanner, they will not be even; they will vary in thickness, and therefore the roller would be harder in some places than others, and, such being the case, the sliver or yarn passing through the rollers would be pressed unevenly. The same weight is, of course, always hanging from the top or leather-covered roller, but the difference in the thickness of leather would produce a varied treatment of the delicate fibre; a harsh and soft treatment and unsatisfactory yarn would be the result.

It would be very wasteful indeed, to "even up" a whole skin at one operation, therefore the "evening up" must be done when the skin is cut up into strips of the required width for covering the rollers. When the strips cut out of one skin are "evened," each strip will be an even thickness throughout, but all the strips will not be one thickness; this, however, does not matter. What is wanted is a "hot" or a pair of "hots" of even thickness, it being unnecessary to have them all one thickness.

The cutting up into strips is the first operation on the skin. This is done by hand on the ordinary cutting-up board, a board with a single holding-down bar, which is also used as a straight-edge, and the cutting done with an ordinary knife. There is another cutting-up board on the market, which is an improvement, as it is fitted with a duplex holding-down bar, holding the skin down on each side of the cut, and it is useful for the cloth as well as the leather. The duplex bar forms

cutting both ways; thus it is not necessary to bring the knife back again after it has made the cut—one cut is done with a push and the next one with a pull of the carriage.

The skins are now in strips which vary in thickness and require "evening up." This cannot be done by hand, as the irregularity in the thickness is too slight to shave with a knife or scraper—the tanner has already gotten as near as possible with this method. The only method of getting rid of this irregularity is by grinding, and grinding means a grinding machine, so this will have to form part of a roller-covering plant if the rollers are to be covered with "hots" of even thickness. The machine for grinding is so well known that it is unnecessary to give a full description of it here. The operation of grinding the strips is as follows: The strips are secured to the drum by the neck end (the circumference of this drum is such that it will take the length of the skin without overlapping) by passing one end into a slot and securing it by a clamp. This drum revolves slowly, and is moved towards the grinding roller thus the strip comes into contact with it, and the whole surface is rapidly ground or "evened up."

Now the skin has been cut into strips and made equal in thickness all over, the next operation is cutting the strips into the length required to make the "hots." To do this successfully without the aid of a machine requires the services of a very careful and experienced man. The pieces must be cut exactly into a certain length, and the cutting must be done in such a way that the ends of the leather will be beveled or tapered for splicing. If this is not done properly an uneven joint is the result, and the advantage of

"evening up" by grinding is lost. Further, if the knife is not held at the same angle every time, the size of the "hot" will vary and will be tighter or slacker than is requisite or desirable when drawn over the cloth-covered roller. To obviate all this risk and to ensure the full advantage of "evened-up" leather, the cutting must be done with a machine. A properly designed machine will cut the leathers the right length every time when once accurately set, and will give the same bevel or splice every time, and this without the skill referred to above. The strips are placed upon the machine table face side down, passing under feed rollers to pressing bars which hold the strip while it is being cut with a knife. This is drawn across a slide giving the correct bevel to each end, so that when the ends are brought together and the splicing matched, the joint will be the same thickness as the other part of the "hot," and will be the same in "feed," except for the thin layer of glue between the splicing; but owing to the accurate way in which the machine has done the cutting, the difference in "feel" will practically be imperceptible.

The leathers are now ready for cementing, which is done by hand. More care than skill is required to bring up the spliced ends together so as just to match the cutting, which is so well defined in machine cut leathers, and ensures the "hots" being all one size. When the ends have been smeared with glue and brought together in the manner above described, they require pressing. This operation is done best in a press with a brass turntable having four arms. One arm is always out towards the operator, and another arm is always in the press. The leather is folded over the near arm, and it is then turned into the

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press. These arms prevent the "hots" sticking together inside, and when the pressure is taken off there is a passage through the "hot." No opening out has to be done afterwards, as there is when a press without turntable is used. When spicing and cementing has been properly done, there will be no burst due to slovenly work.

For drawing on the "hots" there ought to be two machines in the roller-covering room, one worked by hand for the smaller rollers, and one worked by power for the larger ones; thus the proper purchase is obtained for the various sizes of rollers, and the "hots" are not unduly strained, reducing the percentage of bursts almost to the vanishing point. The springs should on no account be used if not in good order, otherwise irreparable damage will be done to the "hots" and cloth.

In a well-appointed and arranged roller-covering shop the ending machine will be fitted with a fan for taking away the fumes and dust given off during the process of ending the rollers which would otherwise inconvenience the workman and reduce the output. If the manager or his assistant would make a special point of watching the work of the machine it would often be better done, and less "licking" would result, besides the number of cloth coverings ruined by oil being reduced.

The roller has now reached a stage which used to be considered the finishing one, but in these days they must pass another process—

that of calendering—which makes them perfectly round or cylindrical and parallel. It is, of course, impossible to obtain absolute perfection, but when the rollers have passed the calendering machine they are very near perfection, so near that a very delicate apparatus is necessary to detect any defect. The roller calender is an automatic machine. The rollers are placed on a table at the front of the machine, which takes each roller separately, rolls it eight times, and then delivers it on the table at the back. The leather covered rollers are rolled over a plate heated with steam, gas or oil, as it is most convenient. This plate must not be heated when the machine is used for rollers covered with cloth only. When the rollers have passed through the calender they are, as already stated, as near cylindrical and parallel as possible, and, further, the leather has a highly polished and smooth surface. This means a lot to the spinner when they are put in work, for the fibre is drawn more evenly, fewer ends break down and the yarn greatly improved.

The rollers are now finished, but before they are sent into the mill they ought to be tested. This is done in the apparatus already twice referred to, which is very simple and delicate, though not liable to get out of order, and can be used by anyone. The apparatus consists of two parallel planes, one above the other. In the lower one, which is stationary, there is a V groove;

the other plane is flat and is made to rise and fall for the various diameters of rollers. The apparatus is placed in front of a strong light and the roller to be tested placed in the V in the lower plane and the upper one is brought gently down on to the roller (the top plane is balanced so that no pressure is put upon the roller), and if no light can be seen between the roller and the top plane it is right and fit for work.

Something more can be done for the efficient working of spinning rollers after they have left the roller coverer's hands, and the life of the leather can be considerably lengthened by having a good yarn traversing motion on the mules, ring frames, etc. The best apparatus for this purpose is one which gives the most regular traverse along the length of the roller and has the quickest reversing arrangement. By the use of this apparatus the whole or nearly the whole length of the leather is used. Without a traversing motion the leather soon wears hollow. It is unnecessary to say here what happens with hollow rollers, as every spinner and piecer knows to his annoyance and loss. The efficient life of the roller is most decidedly lengthened by using a traverse motion, and it must be highly gratifying to the inventors to know that they are now fitted on all mules, frames, etc.

From the condition of the top roller the experienced overlooker can tell where to look for defective machinery, and he should examine the defective rollers before they are

returned to the roller-covering shop.

When a roller has worn to such an extent that it is no longer efficient and is incapable of turning out even yarn, it must be returned to the roller-covering shop, not to be re-covered, but to be ground. This is done in a small grinding machine which grinds the leather face of roller perfectly parallel and cylindrical again, after which it is put through the calendering machine. After the calendering, the roller will have to be varnished, which may be done in the grinding machine or in the varnishing lathe. The roller is now equal to one which has just been re-covered as far as efficiency goes. The next time this roller comes back to the roller-covering shop it will have to be re-covered.

In stripping the old leather off, it is advisable to use a special hand stripping appliance to avoid cutting the cloth.

When the leather is stripped off the cloth foundation the roller should be kept in a warm (not hot) atmosphere which is slightly humid for as long a time as possible before recovering, so as to give the cloth a rest and thus renew its original elasticity or "cushion." Textile Recorder.

### Wasting Disease.

Jones says he thought his gas meter had gas trick fever, but now believes it to be affected with galloping consumption.—Ex.



## Principles of Fabric Structure

Although mainly concerned with woven fabrics, it is well to begin by taking a brief survey of all the methods by which cloth can be produced, whether by the ordinary loom, which is familiar to all, or by other processes or classes of machinery. On making such a survey it will be found that two distinct principles of structure are adopted in the production of fabrics. By the first principle, fibres of various kinds are placed together in such a manner as to produce a substantial sheet of the required width and length, which possesses a moderate degree of strength and wear-resisting properties. Feltings and sheets of wadding are the principal examples of this class. The better classes of feltings are made from wool or hair fibres. These are first of all reduced to the form of sheets by carding. A number of such sheets, according to the desired thickness of the ultimate fabric, are then placed upon each other and subjected to pressure while in a hot, moist condition. This brings into play the natural felting or milling properties of the material and causes fibres out of the different sheets to interlock with each other to such a degree that they can be separated only with difficulty, the result being a solid sheet of matted fibres possessing the qualities named, and suitable for a variety of purposes. Vegetable fibres do not possess the felting properties; hence they cannot be used in the same manner, but thick sheets of cotton fibres similarly disposed are used for wadding or placing between ordinary woven fabrics to increase their bulk and produce quilted cloths; also for surgical purposes. The second class of fabrics may be described as thread structures, for in this case the fibres or raw materials are first of all converted into threads or filaments of indefinite length and sufficient strength to enable them to withstand the necessary operations for conversion into a fabric. The production of such threads is the function of spinning operations, in which comparatively short fibres are placed together in such a manner as to take advantage of their natural cohesive properties and produce a continuous length; or natural filaments of considerable length are combined so as to produce a thread of desired thickness and strength. Thread structures are of course much more important than fibre structures, since they admit of greater variety in their construction and are more complicated. Opinions differ as to the number of distinct thread structures, but for present purposes they may be divided into four classes, namely, knitted fabrics, plaited fabrics, lace, and woven fabrics.

Knitted fabrics are composed of a single thread which is first of all formed into a row of loops of the desired width or shape. Another row of loops is then formed by passing the thread successively through each of the loops of the preceding row. This operation is continued until the required length has been obtained, and by varying the number of loops in successive rows any desired shape of fabric can be produced. Knitted fabrics are readily distinguishable from the fact that if cut at any point the whole structure can be unraveled into a single thread.

Plaited fabrics may be described as warp structures, since they are produced by interlacing and folding about each other a number of longitudinal threads. They may be distinguished from woven fabrics, to certain styles of which they bear some resemblance, by the fact that the interlacing and folding is always in a diagonal direction. The threads are divided into two sets, which are caused to zig-zag from one edge of the fabric to the other, but in opposite directions. At the same time each set of threads interlaces alternately under and over each other. On arriving at the edge of the cloth the threads turn over or fold about themselves and move to the opposite edge. The difficulty of dealing with a large number of threads makes it impossible to produce wide fabrics in this manner, and the principle is mainly employed for the production of narrow wares such as braids and neckties. The structure of lace is probably more complicated and varied than that of any other fabric. It is mainly a warp fabric, and the essential feature is that threads may be twisted completely around each other as well as moved transversely, the latter motion taking place when it is desired to form figures. The simplest form of machine-made lace may be said to consist of a set of parallel threads, round each pair of which a third thread is twisted. Where figure is required the latter thread is passed horizontally from one to the other of the parallel threads, being twisted round them after each movement. When not working in this manner, the moving thread twists round one or another of the parallel threads, leaving an open space between them, and in this manner figures of varying degrees of density are produced upon an open-work ground, the texture being of remarkable strength, considering its openness and the quantity of material consumed.

Woven fabrics are formed by the interlacement, at right angles, of two distinct sets of threads, which are distinguished as "warp" and "weft" respectively. The former set of threads occupies a longitudinal position in the loom, while the latter set is placed transversely. Two results follow from this interlacement, namely, structure and pattern, for evidently the mere interlacement of the threads by binding them together gives a firm substantial fabric, while pattern or design follows from the order of the interlacement.

Out of a considerable variety of woven fabrics three distinct types are noticeable, namely, (1) ordinary woven fabrics, (2) pile or plush, and (3) gauze or leno. In the ma-

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majority of cases the warp and weft of weft threads; and (b) double-threads are placed in the cloth at several angles to each other, and remain in that position as described above. These may, therefore, be defined as ordinary woven fabrics. It will, however, be convenient to sub-divide them into (a) single-make fabrics or those composed of one set of warp threads and one set of weft threads; and (b) double-make or compound fabrics, in which several sets of warp and weft threads take part in the construction, in order that greater strength, bulk or facility for ornamentation may be obtained. Pile or plush fabrics are distinguished by having a pile or nap formed by threads or fibres which stand erect from a



ground cloth. Three kinds of pile may be distinguished, namely, warp pile, weft pile, and raised pile, the latter being a fibre pile, while the other two have the pile formed by threads. Warp pile is formed by two methods. In the first case lightly tensioned threads are flushed, in a negative manner, upon the surface of a ground cloth, as in terry or Turkish toweling. In the second method, which gives a positive pile, warp threads from a separate beam are raised above wires which are inserted in the shed, or division, in the warp threads, during weaving. After a sufficient number of such wires have been woven into the surface of the cloth, the first one is either withdrawn or cut out. When withdrawn the pile threads are left in the form of loops, as seen in Brussels carpets; when the wires are taken out by cutting the threads which pass over them, cut pile, as in velvets and plushes, results. In weft pile, threads of weft are flushed or floated over the surface or floated over the surface cloth. These flushes or floats are afterwards severed by a fine sharp-pointed knife; velveteens and corduroys belong to this class. Raised or fibre pile is produced by subjecting ordinary woven fabrics having soft spun weft to a process known as raising. The cloth is here passed over revolving rollers which are covered with hooked wire teeth. These teeth penetrate the threads and partially drag at the fibres as the cloth leaves the rollers. This class is not, however, usually classed with pile fabrics, since the pile is due to an after-process, and is not formed during weaving, or does not require a special order of interlacing.

Gauze or leno fabrics.—The characteristic feature of this class of weaving is that warp threads are twisted partly around each other, giving a light, open fabric, bearing some resemblance to lace and possessing greater strength and openness than any other class of woven cloth.—Cotton Factory Times.

#### Evils in Bleaching.

The process of bleaching cotton goods in the piece is, in itself, a very simple operation. A kier with a circulation as nearly perfect as possible to insure a good boil, the necessary chemical baths after the boil, a thorough washing in cold water, and the operation is complete.

But from the time the goods are started in the grey, until they are delivered in the "white room," eternal vigilance is absolutely necessary, if a perfect bleach is desired. Nothing is left to chance. The foreman bleacher who knows his business can generally get to the cause of trouble in a very short time.

In a bleachery where I worked at one time, trouble was reported from another department. A batch of goods was shown with a series of red stains running along the selvage of the goods. The stain was very pronounced at the beginning, in fact, very heavy, and getting fainter until worn off altogether. The batch of goods shown had just been received

from the bleaching department; so there was no question as to where the trouble belonged.

The bleacher immediately went to his assistant who said that no stains had been reported to him. A short investigation failed to reveal the cause, and no more was heard of the matter until the next day, when the same thing had happened again in exactly the same way, except that the stain ran nearer the middle of the piece. By this time the foreman was on the lookout and had his men watching closely for a repetition of the trouble. He inspected every machine with care, and finally concluded that the trouble came from the last machine, the so-called "white washer."


Over this washer and bin, a large belt was running incased in a covered frame, except where one board had been recently knocked off. An old oil can suspended from a hanger which supported a line of light shafting above was the cause of the trouble. An occasional drop of paint mixed with oil and dirt would fall, strike the belt, and fly through the belt casing onto the cloth and stick. The mangle which pulled the goods from the white bins did the rest. This is but an illustration of some troubles of a bleacher and what he has to contend with. Everything may go along fine for a stretch, then comes trouble, sometimes singly, and sometimes in large, generous bunches.—Fibre & Fabric.

#### The Science of Friction.

Scientific management as a direct means of reducing manufacturing costs is attracting widely the attention of power users and producers, and it is not playing with words to state that one of the most important factors of scientific management is the elimination of friction. It applies to every department of every industry; the best work is obtainable only where there is the least possible friction. The elimination of friction is important between employees, heads of departments, members of the managing force, in fact, between everyone in business connection from the economic viewpoint; and it is also important from the mechanical viewpoint; wherever there is a possibility of friction.

Mechanically speaking, the work of eliminating friction involves two points of consideration, design and construction of bearing and lubrication. If the statement is true that a perfect bearing requires no lubrication, then, of course, the design and construction of the bearing is the more important point of consideration in the question of elimination of friction.

Taking this latter as a theme it is stated that the greatest amount of power lost by friction is not, generally speaking, in the bearings of machines, but rather through the friction of shaft line transmissions. On machines the use of roller and ball bearings has become quite universal, because it is to the interest of the machinery manufacturer to produce machines which will require the least amount of power to



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operate. But on shaft lines the use of roller and ball bearings has not been so generally adopted, and this is most likely due to the fact that the manufacturer who puts in the shaft lines and power transmission is not a mechanical specialist and has not realized the great importance of minimizing friction.—Fibre and Fabric.



# Practical and Scientific Management in the Spinning Room

Contributed exclusively to Southern Textile Bulletin by Yancy L. Yon

(Continued from last week)

What is the constant for the gears in diagram View No. 3?

The front roll gear C of 30 teeth driving the crown gear D of 168 teeth which drives the draft change gear E that drives the back roll gear F of 84 teeth, the diameter of the back roll being 7-8 inches in diameter and the front roll being 1 inch.

$1 \times 168 \times 84 \div 30 \times 1 \times \frac{1}{2} = 542$  constant.

To find draft when constant is known, divide constant number by the gear used.

What is the draft of a machine when the constant number is 542 and a 56 change gear is used?

$542 \div 56 = 9.60$  draft.

Now suppose that the roving you have at the back would require a draft of 9.60 to draw it to the required degree of fineness. What gear would be required to produce it, (9.60 draft)? Rule: Divide the constant number by the draft, the quotient will be the gear.

$542 \div 9.60 = 56$  ans.

To find what hank roving it will take to produce a certain number of gears with a certain draft. Rule: Divide the draft by 2 (if two-ply) and divide this answer into the number of yarn desired. Example: What hank roving will it take to produce 60s yarn if the desired draft is 9.60?

$9.60 \div 2 = 4.80$ .  $60 \div 4.80 = 12.50$  hank roving.

If a 12.50 hank roving produces 60s yarn, what is the draft? Rule: Divide the hank roving by 2 and divide the number of yarn by the result thus obtained.

$12.50 \div 2 = 6.25$

$60 \div 6.25 = 9.60$  draft.

What will be the number of yarns if 12.50 hank roving is used with 9.60 draft? Rule: Multiply the hank roving by the draft and divide by 2 the number of ends run in at the back.

$12.50 \times 9.60 \div 2 = 60$ s ans.

## Twist Calculations.

It will be noticed that the above, as well as former calculations, have dealt with the accompanying drawings, and it should be considered that the calculations are used in all cases where permitted. Reference

will again be made to View 3.

To make an actual calculation of the twist being inserted in View 3 it would be necessary to find how many yards, that is, the total length of the yarn that is produced by the front roll. Then find the speed of the traveler per minute. Divide the speed of the traveler by the number of inches of yarn produced by the front roll per minute.

Example: What is the twist inserted in the yarn per inch if the front roll produces 446,1072 inches per minute and the traveler makes 8,145,615 R. P. M.?

By referring back we find that in the speed calculations, the amount of yarn produced per minute is 446,1072 inches and the speed of the traveler is 8,145,615 R. P. M. Then  $8,145,615 \div 446,1072 = 18 \frac{2}{3}$  turns put in the yarn per minute. The above is a much harder calculation than the following rules and calculations the above being given only to give an actual knowledge of the actual twist that is inserted in the yarn per inch with the gears being so arranged as in View 2 of the drawing.

## Twist Constant Number.

The most rapid way to calculate the twist is to find the constant number for the gears in the head. The constant number divided by the gear will give the number of turns per inch that is inserted in the yarn.

The constant number divided by the twist inserted will give the gear, etc.

To find the constant.—Consider the gear (a) on the end of the front roll a driver and consider the twist gear D as a one tooth gear. Multiply together all the driving gears and the diameter of the cylinder F and divide the product by the result of multiplying all of the driven gears together times the working diameter of the whorl G and the circumference of the front roll.

Example: What is the constant for the gears in View 2 the gear a on the end of the front roll containing 108 teeth through a "carrier" driving the twist gear D of 45 teeth, which is compounded with and drives the jack gear C, which

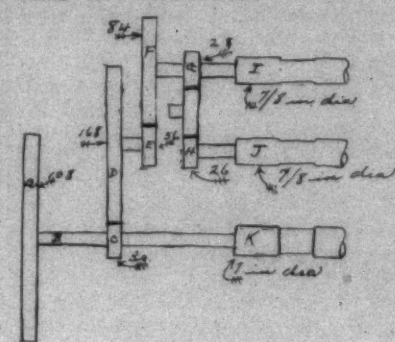
meshed with the cylinder gear C on the shaft of the cylinder F, which is 8 inches in diameter. The front roll is 1 inch in diameter or 3.1416 inches in circumference.

$$108 \times 88 \times 30 \times 3$$

$= 7.7446$  constant no.

It will be noticed in this calculation where the length produced per minute was divided into the speed of the traveler the answer was  $18 \frac{2}{3}$ . Now there is an allowance to be made for contraction in twist which may be from 3 to 5 per cent.

Example: What will be the actual turns per inch in the yarn after an allowance of 3.85 per cent is made for contraction?



View No. 3

$$18.67 \div 3.85 = 4.84 \text{ or } 3.85 \text{ per cent.}$$

$$18.67 - 484 = 13.83 \text{ actual turns.}$$

Proof: What is the twist being inserted in the yarn in View 2 the constant being 7.7446 and the twist gear containing 56 teeth? Rule: Divide by the constant by the gear.  $7.7446 \div 56 = 13.83$ .

What gear will be required to insert 13.83 turns per inch if the constant is 7.7446? Rule: Divide the constant by the number of turns required and the answer will be the gear required.

$$7.7446 \div 13.83 = 56 \text{ gear.}$$

What is the constant number if a 56 tooth twist gear inserts 13.83 turns per inch in the yarn? Rule: Multiply the twist inserted by the twist gear.

$$13.83 \times 56 = 7.7448 \text{ constant.}$$

It will be seen by the noting carrying the twist calculation above

that it gives a difference of 2 points in the decimal of the latter calculation, but the constant in 77446.

To find the number of turns of twist that should be put in any number of yarn. As has been stated above the amount of twist that should be inserted depends upon the class of yarn and the stock being used and whether warps or filling. For ordinary warp yarns a constant of 4.75 is used and for filling a constant of 3.25 is used for a multiple and by using the following rule it will be found a simple calculation to obtain the required twist to be inserted into any number of yarn. \*Rule: Extract the square root of the number of yarn and the answer, if warp is multiplied by 4.75 and, if filling, is multiplied by 3.25. Example: What is the twist that should be put in 18s warp?

Sq. root of 18.00 = 4.2426  $\times 4.75 = 20.115$  turns.

If filling multiply the square root by 3.25.

To find the ratio of cylinder to whorl. This is a calculation with which but few are familiar and the following rule is given for the benefit of those who do not understand it. Rule: Divide the diameter of the cylinder by the diameter of the whorl and allow a deduction of 10 per cent for slippage of the band. Example: What is the ratio of the cylinder F which is 8 inches in diameter to the whorl A which is 15/16 in diameter?

$8 \times 16 = 128 \div 15 = 10\% \text{ is } 7.67$ , ratio of cylinder to whorl.

NOTE—The ratio can be used in figuring the constant for twist, but as this subject has been fully explained it is not deemed necessary to go into details regarding the use of the ratio after it has been calculated in the constant calculations.

(Continued Next Week.)

## Chops for the Tramps.

"So you are hungry, eh?" said the woman to the tramp. "How would a few chops suit you?" "Lamb or wood?" asked the tramp, cautiously.—Ex.

# W. H. BIGELOW

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## DISCUSSIONS BY PRACTICAL MEN

### Waste Cost Figures.

In response to a request made on this page two weeks ago we are publishing on the editorial page this week a table giving the waste cost on cotton between 7 and 16 cents per pound. This table represents the cost of 15 per cent waste and will doubtless be found useful.

### A Correction.

On this page of our issue of last week, in an article headed "A Question," and signed by "New Spinner," the weight of a finished lap was given as 29 pounds, when it should have been 39 pounds.—Editor.

### Answer to "Oiler."

Editor:

In answer to "Oiler's" question relative to drafts will say that in the room of which I am overseer we are running 12 different numbers of yarn, using single roving, and my drafts are as follows:

No. of Yarn.	Draft
25s	10
9	10.50
12	8.50
15	9
17	9.40
20	9.60
20	9.60
16	8.65
10	7

W. P. L.

### Escaped From Jail.

Adam Dyson escaped from the county jail at Lenoir, N. C., last week by running out by the wife of the jailer. She had gone to clean up the cells and when she unlocked the door to Dyson's cell, he made a break by her and succeeded in making his escape. His freedom was of short duration, he being captured in the cotton mill at Granite Falls the next night by Chief of Police Lawrence Payne of that town and returned to the jail. His father is night watchman at the cotton mill and after making his escape here he went direct to that point.

### Cotton Spinning Examinations.

Questions and Answers from the April, 1913, Examinations of the City & Guilds of London (Eng.) Institute.

Question.—Describe in detail how you would proceed in setting a card throughout, and state what gauges you would use and how you would apply them at each point. Which of the parts are most liable to move after setting? Would you take any special precautions to prevent this? If so, state them.

Answer.—The adjustment places on a carding engine are (1) between feed plates and licker-in, licker-in to cylinder, mote knives and under casing to licker-in, cylinder to flats, doffer to cylinder, cylinder under casing, doffer comb and flats comb. The settings chiefly centre around the cylinder, and the general law is to set the taker-in, the flats, and the doffer, as close as possible to the cylinder without touching. A gauge of 7/1000 inch is a reasonably good setting for these positions, although for heavy weights of carding, and the wire not in the best order, this may be sometimes difficult to obtain. On the other hand a setting 5/1000 inch is often obtained between doffer and cylinder in fine work. Gauges of the right thickness may be used for these settings, that for the flats being of small size and special shape in order to pass between the flats after one or two flats have been taken out. In one make of carding engine the flexible bend is constructed with suitable apertures for the insertion of a specially long gauge between the wire of the cylinder and flats. Gauge settings may be checked by "rear" setting when the machinery is stopped. The upper extremity of the under-casing should go as high up as possible between the cylinder and taker-in, and the setting may be got to 10's or 12's gauge, but the front extremity of cylinder under casing, nearest the doffer, may be 1-4 inch or more away, working down to 10's or 12's gauge at the bottom of casing. The mote knives and the face of the feed plate may be set as close as possible without touching the taker-in, or, say, at about 7's gauge. These settings are more especially for Egyptian cotton and wider settings are often adopted for American cotton. The condition of the machine, the accuracy of grinding, the amount of waste, and the weight of cotton carded per week, are items which may influence the settings more or less. Disturbance of adjustments are perhaps less likely to occur in most cards than formerly as more rigid fixings have been adopted. Some machinists believe in reducing the number of small screws and adjustment places with a view to preventing disturbance of parts. In many cases the doffer pedestals are now very rigidly secured to the card bends as well as the card sides in order to maintain accurate settings. After setting it is well to ring up all nuts as a final precaution. It is advisable to round the flats a second time to see if one adjustment affects another.

Question.—What would be the effects produced on a drawing frame sliver by the following faults in the machine:—(a) Too open setting of the rollers, (b) too close setting of the rollers, (c) badly geared draft wheels, (d) neglect in oiling the rollers? State how you would distinguish the effect of each fault.

Answer.—(a) When drawing rollers are too closely set there is often a tendency for the cotton to offer too much resistance to the drafting effect of the rollers, and then portions of cotton to come out lumpy or insufficiently drawn, giving the effect often termed in mill parlance "spewing" of the rollers.

(b) When rollers are too widely set there is a tendency for the drafting to be done more or less irregularly, and the sliver to present a somewhat irregular appearance, and for the wrappings to vary somewhat.

(c) As regards badly geared draft rollers if two of the usual four be geared in too thin or shallow a manner there will be a tendency for some teeth to be missed, and for all the rollers, excepting the delivery pair, to lose so much speed, with the net effect of increasing the total roller draft to the extent of the slippage, but giving at the same time a croppy or very variable effect. Some short portions of sliver might be correct in counts, others rather too fine, and other lengths much too fine, in proportion to the amount of slippage at any period. It might be possible to gear the draft rollers so very shallow as to cause the back rollers to stop altogether, with a very manifest effect.

(d) Neglect in oiling the rollers. Perhaps this is likely to show up most in regard to the front rollers, because these revolve the fastest and do the most drafting work. If the front top rollers were stiff for want of oil they would slip and give an insufficient drafting effect, which would result in the sliver coming out insufficiently drafted, this being probably evidenced by the wrappings at the draw frame or a later machine. A back top roller sticking would give the opposite effect.

Question.—Give a list of the essential qualities of a good card clothing, and describe how the required qualities are obtained.

Answer.—Card clothing consists essentially of two fundamental parts, viz., the wire teeth and the foundation or base in which the teeth are secured. Both these items have been subjected to a good deal of experiment and practical experience in order to determine the best features. Card clothing is not an item in which benefit is derived from using cheap and low qualities. Mild steel wire is now only used to a moderate extent, the usual practice being to employ hardened and tempered steel wire, which is stronger, much more durable, and keeps a sharp point longer. It is necessary for card clothing to be firm, yet elastic in regard to the foundation, to have wire of a proved good working shape or section for the wire to have the right amount of "keen" or forward inclination, and to be of well defined uniform thickness and temper, of

correct length of tooth, and to be correctly inserted in the foundation. For flats and doffers probably a cotton, wool, cotton foundation is most used, possessing the required strength, good holding capacity for the wire teeth, and yet with sufficient flexibility for wrapping neatly upon the doffer and a reasonable amount of elasticity for the wire. To increase the elasticity effect it is a common practice to put a facing or very thin layer of rubber on the top of the cloth foundation when intended for the cylinders, except in very hot countries. The card setting machine which cuts off the wire bends each small piece into two teeth united by the crown, and then inserts each pair of teeth into the cloth foundation is really a very wonderful machine and does the work with great accuracy and rapidity. Card clothing must possess good carrying effect on the cotton, permit the waste and dirt to be readily removed by the stripping operation, enable the cotton to be transferred from one working organ to another, and be convenient for regrounding as often as may be deemed advisable. There can be no doubt that improved card clothing, combined with greater truth in the card surfaces, have materially helped in the great productions of modern cards.

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# SOUTHERN TEXTILE BULLETIN

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THURSDAY, AUGUST 21

## Textile Course for Mill Boys.

At the request of the Textile Department of the North Carolina College of Agriculture and Mechanics Arts, Raleigh, N. C., we wish to call attention to the Work Course which they are offering to mill boys.

This course is only open to 12 boys and those who wish to enter should apply at once. Those entering the course will alternate in school and the mills, working a week in each.

They will be divided into two groups and while one group works a week in the cotton mills at Raleigh the other group will be in the textile school and at the end of each week the groups will change places.

By this arrangement the mills in which they work will always have some one on the jobs and the boys will be earning almost enough to pay their board during the week in which they are in the textile school.

Those who desire to enter should write to Prof. Thos. Nelson, West Raleigh, N. C.

## The Cost of Waste.

One of the contributors to our practical discussion page recently requested us to publish a table of waste costs which was prepared by our editor some time ago and we are therefore publishing this table below.

There is nothing unknown or unusual about this table but it is in convenient form for those who figure their waste on a basis of 15 per cent.

The first column gives the cost of the cotton, the second the cost of 15 per cent waste from that price cotton and the third cotton plus waste or the cost of the cotton per pound of goods.

It is a fact that many mills do not figure waste in accordance with this table, but simply add 15 per cent to the cost of the cotton to cover the waste which is not correct.

If there is 15 per cent waste we will produce 85 pounds of goods from 100 pounds of cotton and 100 pounds of cotton at 13 cents costs \$13.00.

Dividing \$13.00 by 85 will give the cost of cotton in goods as 15.29

cents as will be seen from the table.

The waste cost on 13-cent cotton is therefore 2.29 cents whereas if we had only added 15 per cent to cover the waste cost it would have been only 1.95 cents.

While the percentage of waste varies with different mills and under different conditions it is as a rule not far from 15 per cent. To determine the waste we should deduct from the gross weight of cotton used the amount of cotton that could be purchased with the proceeds of the sales of the waste and the difference between that figure and the amount of goods produced is the waste.

Some mills take no account of the proceeds of waste sales when determining the waste on the ground that it is small and should be left to equalize any inaccuracy in cost estimates.

The figures below will be found of use to those who allow for 15 per cent waste:

Price of cotton	Cost 15% waste	Cotton plus waste
7 c	1.23c	8.23c
¼	1.28	8.53
½	1.32	8.82
¾	1.37	9.12
8	1.41	9.41
¼	1.46	9.71
½	1.50	10.00
¾	1.55	10.30
9	1.59	10.59
¼	1.64	10.89
½	1.68	11.18
¾	1.72	11.47
10	1.76	11.76
¼	1.81	12.06
½	1.85	12.35
¾	1.90	12.65
11	1.94	12.94
¼	1.99	13.25
½	2.03	13.53
¾	2.08	13.83
12	2.13	14.12
¼	2.17	14.42
½	2.21	14.71
¾	2.25	15.00
13	2.29	15.29
¼	2.34	15.59
½	2.38	15.88
¾	2.43	16.18
14	2.47	16.47
¼	2.52	16.77
½	2.56	17.06
¾	2.60	17.35
15	2.64	17.64
¼	2.69	17.99
½	2.73	18.23
¾	2.78	18.53
16	2.82	18.82
¼	2.86	19.11
½	2.91	19.41
¾	2.96	19.71
17	3.00	20.00
¼	3.05	20.28
½	3.09	20.59
¾	3.13	20.88
18	3.17	21.17
¼	3.22	21.47
½	3.26	21.76
¾	3.31	22.06
19	3.35	22.35
¼	3.40	22.65
½	3.44	22.94
¾	3.49	23.24
20	3.53	23.53

## Appealing For Funds.

The National Child Labor Committee, through newspaper publicity columns, is appealing for funds to be used in the campaign now in progress to secure from the Georgia legislature a law prohibiting the employment in that state's mills of children under 14 years of age, and limiting to 10 a day the working hours of all minors.—Daily Trade Record.

What do they need funds for? Has Dr. McKelway asked for a raise in salary?

## Cotton Consumption.

Washington, D. C.—Cotton consumed in the United States during July amounted to 486,246 running bales, compared with 466,914 bales consumed during June, the census bureau announced today.

Cotton on hand July 1 in manufacturing establishments amounted to 1,032,548 bales and in independent warehouses 410,954 bales.

Imports were 9,496, equivalent to 500 pound bales; exports 140,710 bales.

Cotton spindles active during July numbered 30,022.

Cotton consumed during July in cotton growing states amounted to 248,460 bales, compared with 243,263 bales in June; in all other states 237,786 bales compared with 223,651 bales in June. Of the total cotton consumed there were 15,431 bales of foreign cotton and 24,604 bales of lint.

Cotton on hand July 31 in manufacturing establishments in cotton growing states amounted to 363,508 bales, compared with 502,367 bales June 30; in all other states 669,042 bales compared with 794,290 bales June 30. Cotton in manufacturing establishments included 82,988 bales of foreign cotton and 72,479 bales of lint.

Cotton on hand July 31 in independent warehouses in cotton growing states amounted to 327,354 bales compared with 491,250 June 30, in all other states 83,600 bales, compared with 120,269 bales June 30. Cotton in independent warehouses included 2,794 bales of foreign cotton and 29,148 bales of lint.

Of the cotton spindles active during July, 11,969,736 bales were located in cotton growing states and 18,052,918 in all other states.

## No Fear of Early Imports.

One of the sellers on the street who does a large importing business and returned a short time ago from England, said that there is little foundation in the stories heard to the effect that foreign mills have surplus stocks of cotton goods ready to shoot into this country under the new tariff bill. The English mills have plenty of business, as near as he could learn, and the foreign mills on the Continent are in much the same condition. Instead of there being any large surplus stock of cotton dress goods, business has been booked by the foreign manufacturers in such quantities that cotton and dress goods are hard to secure.—Daily Trade Record.



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Charlotte, N. C.**COMBERS,  
LAP MACHINES.****MULES,  
LOOMS.****PERSONAL NEWS**

Sidney Rouse of the Highland Park Mills, Charlotte, N. C., has accepted a position at Kannapolis, N. C.

W. H. Rodgers has resigned as superintendent of the Hamer (S. C.) Mills.

S. S. Campbell will resign as overseer carding at the Lynchburg (Va.) Cotton Mills on August 23rd.

E. L. Brown has accepted the position of second hand in weaving at the Pilot Mills, Raleigh, N. C.

J. H. Mayes has resigned as superintendent of the Fitzgerald (Ga.) Cotton Mills.

M. O. Raftler has resigned as overseer of carding at the Marlboro Mill No. 3, McColl, S. C.

Marvin Fisher has resigned his position with the Highland Park Mills, Charlotte, N. C.

Miss Fannie Striker has accepted the position of district nurse at the Hartsville (S. C.) Mills.

D. A. Hughey has resigned as loom fixer at the Henderson (Ky.) Mills.

W. H. Bolton, of Lumberton, N. C., has accepted the position of overseer of spinning at the Bellwill Mills, Wilmington, N. C.

Fred McDaniel, formerly overseer of spinning at the Bellwill Mills, Wilmington, N. C., is now located at Rock Hill, S. C.

W. P. Loftis has resigned as overseer of spinning at Seneca, S. C., to accept a similar position with the Riverside Mills, Anderson, S. C.

J. V. Jones has resigned as overseer of spinning at the Gluck Mills, Anderson, S. C., to accept a similar position at the Seneca (S. C.) Mills.

Lester Tucker has accepted a position in the finishing department of the Highland Park Mills, Charlotte, N. C.

J. H. Bagwell, of Greenville, S. C., has accepted the position of overseer of weaving at Chadwick-Hoskins Mill No. 4, Charlotte, N. C.

Fred W. Burnet has resigned as secretary of the Monaghan Mills Y. M. C. A. to become secretary of the Anderson (S. C.) Y. M. C. A.

W. C. Quick has resigned as overseer carding on colored work at the Jennings Mill, Lumberton, N. C., and is now located at McColl, S. C.

W. H. Elam has accepted position as overseer of cloth room at Grendel Mills No. 2, Greenwood, S. C.

C. R. Craven, overseer of weaving at the Victoria Mills, Rock Hill, S. C., has been given charge of the carding and spinning also.

J. Wallace Brown has been promoted to second hand in spinning at the Olympia Mills, Columbia, S. C.

K. W. Ware has resigned as overseer of weaving at Aragon, Ga., to accept a similar position with the Dallas Mfg. Co., Huntsville, Ala.

W. E. Ratcliffe has been transferred from overseer of weaving to overseer of carding and spinning at the Pilot Mills, Raleigh, N. C.

W. A. Harvey has been promoted from second hand to overseer of weaving at the Pilot Mills, Raleigh, N. C.

Mike Herring has accepted position as overseer carding on colored work at the Jennings Mill, Lumberton, N. C.

J. C. McDonald has accepted the position of overseer of carding of the Marlboro Mill No. 3, McColl, S. C.

H. H. Willis, of Clifton (S. C.) Mill No. 2 has by competitive examination won a scholarship to Clemson College, S. C.

Chas. Gilliam, of Rome, Ga., has accepted a position as electrician with the Massachusetts Mills, Lindale, Ga.

Miss Isabelle Beall, of Charlotte, N. C., has accepted a position as stenographer at the Cannon Mills Co., Concord, N. C.

W. L. Hall, has resigned as loom fixer at the Montala Mfg. Co., Montgomery, Ala., and is now at the Postex Mill, Post, Texas.

L. M. Bentley, who was with the Steele Hosiery Mills, which was recently burned, has accepted a position with the Durham (N. C.) Hosiery Mills.

John P. Inglett has been promoted from second hand in Mill No. 1 to a similar position in Mill No. 2 of the Merrimack Mills, Huntsville, Ala.

M. P. Stacks has resigned his position at the Brogon Mills, Anderson, S. C., to become overseer of carding at the Lynchburg (Va.) Cotton Mills.

B. A. Robertson is now overseer of carding at the Lumberton (N. C.) Cotton Mills.

W. E. Poag, of Rock Hill, S. C., will be overseer of carding at the new Eva Jane Mills, Sylacauga, Ala.

W. P. Hornbuckle has been promoted from overseer of weaving to superintendent of the Minneola Mills, Gibsonville, N. C.

J. D. Mays, of Chester, S. C., has accepted the position of overseer of weaving at the Springstein Mills, Chester, S. C.

Joe Rackley has resigned as overseer of carding at the Bellwill Mills, Wilmington, N. C., to become second hand in carding at the Delgado Mills of the same place.

Turner Hall, of the Ossipe Mills, Elon College, N. C., has accepted the position of overseer of weaving at the Minneola Mills, Gibsonville, N. C.

A. H. Cottingham, superintendent of the Monarch Cotton Mills, Union, S. C., has been visiting at Greenville, S. C.

A. L. McCombs has resigned as overseer of cloth room at Grendel Mill No. 1, Greenwood, S. C., and accepted a position at Clinton, S. C.

J. W. Trigg has resigned as overseer of weaving at the Brogon Mills, Anderson, S. C., and accepted a similar position at the Merrimack Mills, Huntsville, Ala.

D. E. Madden has been transferred from overseer of cloth room at Grendel Mills No. 2, Greenwood, S. C., to a similar position at Grendel Mill No. 1.

E. W. Winecoff has resigned as slasher tender at the Valley Creek Mills, Selma, Ala., and is now fixing looms at the Montala Mfg. Co., Montgomery, Ala.

**OVERFLOW PERSONALS PAGE 16.****RHOADS LEATHER BELTING****A PROOF OF TANNATE****On Howard and Bullough Spinning Frames**

A southern cotton mill recently bought \$500 worth of Tannate, because they find that on a Howard and Bullough spinning frame SINGLE Tannate has run nine months with only one take-up and is still good, whereas light DOUBLE oak-tanned belts which cost more last only from 6 to 7½ months.

This is one of many cases where the wonderful life of Tannate makes it more economical than other belting. This life is due in part to the choice hides used, but chiefly to the toughness given by the tannage.

Tannate is stretched with unusual thoroughness, thus saving many take-ups. The workmanship represents high skill and careful supervision.

If you have tried Tannate Lace or Tannate Round Belt you know something of the toughness of the Tannate goods. They save many stops from break-downs and consequent loss of output, overhead charges, idle wages and cost of repairs.

Prove it for yourselves. With the Tannate we will furnish printed tags, as many as you wish, for keeping record of it and of any other brands in comparison.

**J. E. RHOADS & SONS**

PHILADELPHIA—26 N. Third St.

NEW YORK—116 Beekman St.

CHICAGO—336 W. Randolph St.

Factory and Tannery—WILMINGTON, DEL.



## MILL NEWS ITEMS OF INTEREST

**Clinton, S. C.**—The Lydia Cotton Mills, Clinton, S. C., has purchased six additional spinning frames from the Fales & Jenks Machine Co.

**Hillsboro, N. C.**—The Cone Export & Commission Co. has been appointed sole selling agents for the well known Hillsboro chevrets, manufactured by the Eno Cotton Mills.

**Burlington, N. C.**—The Ossipee Mills have placed an order with the Woonsocket Machine & Press Co. for a small amount of roving machinery.

**Gibsonville, N. C.**—The Gibsonville Hosiery Mill has been incorporated with a capital stock of \$10,000 by J. L. Kernodle, G. W. Engleman, W. C. Michael and others.

**Anderson, S. C.**—The Anderson Cotton Mills will close down for ten days from August 22nd to September 1st. Some of the people are going to the mountains and others will visit friends and relatives in South Carolina and Georgia.

**Oklahoma City, Okla.**—The Oklahoma Hosiery Co. has been incorporated with a capital of \$25,000 by T. H. Lindley, F. M. Riley, J. B. Barker, M. H. and M. J. Lindley. J. H. Lindley and associates were recently noted as planning to establish a mill.

**Lincolnton, N. C.**—Fire destroyed a cotton warehouse and thirty-six bales of cotton at the John Rudisill Manufacturing Company on last Friday evening between three and four o'clock. The loss is estimated at between \$1,200 and \$1,500. No reason can be given as to how the building caught unless sparks from a traction engine that passed three or four hours before, lodged in one of the bales or a bunch of lint.

**LaFayette, Ga.**—About half of the machinery of the Union Cotton Mill is idle this week, it being necessary to suspend work in several of the departments while two of the boilers were overhauled. It will be about two weeks before the entire plant is again running.

**Long Beach, Cal.**—J. F. McAfee, general manager of the California Woolen Manufacturing Co., has returned from Topeka, Kan., after making arrangements for the closing down of the Topeka plant and its removal here. It is believed eight weeks will be required for the transfer of the plant to this city.

The company hopes to have its plant in operation by December. The plant's 15 looms will turn out 700 yards of finished product daily and will furnish employment to about 200 persons. The plant, it is estimated, will cost in the neighborhood of \$80,000.

**Trion, Ga.**—The Capps Cotton Mills have purchased 2,000 spindles from the Fales & Jenks Machine Co., Pawtucket, R. I.

**Selma, N. C.**—The Ethel Cotton Mills have purchased some additional roving machinery from the Woonsocket Machine & Press Co.

**Greenville, S. C.**—The Chamber of Commerce has received word that the Parker Mills Co., and the Pelzer Manufacturing Co. have packed and gotten ready for shipment their portions of the exhibit for the Knoxville Exposition. The exhibits will be assembled in Greenville and shipped to Knoxville. C. W. Perry will be in charge.

**Columbus, Ga.**—At the annual meeting of the stockholders of the Hamburger Cotton Mills, J. A. Mitchell was elected president and George Hamburger secretary-treasurer. Reports from the officers were gratifying, showing that the mills were in fine shape, that the plant has been operated on full time throughout the year and that the order books were well filled.

**Danville, Va.**—The Riverside and Dan River Cotton Mills will install for power distribution in their mills which they are equipping for electric drive 245 motors ranging from 3 hp. to 100 hp. with oil switches, compensators and accessories, the order for all the equipment having been placed with the General Electric Company.

**Belton, S. C.**—The Petroleum Oil Company of Anderson, S. C., through its representative, F. V. Tribble, secured the contract for painting all of the houses in the Belton Mill village, 213 in all. It will require a carload and a half of paint and oil and the contract calls for the expenditure of several thousand dollars. The contract for the labor in painting the houses has been let to W. C. Smith.

**Laurel Hill, N. C.**—It is reported that Ralph Morrison, who recently resigned as manager of the three mills at this place, is organizing a company to build a yarn mill of about 4,000 spindle capacity.

**Greenville, S. C.**—Frank Hammond, recently elected president of the Westervelt Mill, has been forced to resign his position on account of ill health. For the time, between Mr. Hammond's resignation and the election of his successor, J. H. Mayes of Charlotte, is in direct charge of the plant.

**Union, S. C.**—The Union Cotton Mills gave an excursion to Hendersonville, N. C., on last Saturday for the benefit of their operatives of the mill. The grown persons attending paid one dollar for the round trip, children went free. The mill company served refreshments free and the day was spent picnic fashion. A large crowd was present and enjoyed a delightful outing.

**Greensboro, N. C.**—The Proximity Mfg. Co. will place in operation for electric drive in its mills a 937 kv-a. Curtis turbo-generator with 7 kw. and 14kw. motor-generator sets, two 5 kw. and two 100 kw. transformers, sixteen motors ranging from 2 hp. to 100 hp. switchboard and accessories. This equipment will be built and installed by the General Electric Company.

**Columbia, S. C.**—Fire which was thought to have been caused by a flying spark caused damage to the amount of \$100,000 at the plant of the Southern Aseptic Laboratories. One wing of the building, containing valuable machinery was saved. The flames were fanned by a brisk wind which preceded a heavy rain, the later assisting in the work of extinguishing the flames. The plant is used for the manufacture of abcosting about \$3,500,000.

**Rock Hill, S. C.**—Hamilton Carhartt Manufacturing company, principal offices at Rock Hill, has been chartered, with a capital of \$100,000. The officers are Hamilton Carhartt, president; Hamilton Carhartt, Jr., vice president; E. A. Partridge, secretary, and W. W. Carhartt, treasurer. This is the incorporation of the above company which was previously not a corporation.

**Thomasville, N. C.**—The Sellers Hosiery Mills, of Burlington, N. C., reported last week as to put a branch plant at this place, state that they will establish a plant in a 50x150 foot building, which is already erected, and install 50 knitting machines with a daily capacity of 300 dozen pairs of half hose. The machinery, which will be electrically driven, has been ordered. The cost will be about \$6,000.

**Ware Shoals, S. C.**—The Ware Shoals Mfg. Co. has arranged to add to the electrical equipment in its mills a 937 Curtis turbo-alternator with 15 kw. turbo-exciter and 10 kw. motor-generator exciter set, 375 kv-a. and 1500 kv-a. alternating current generators, 20 hp. and 100 hp. motors, switchboard panels and accessories, all of which have been ordered from the General Electric Company.

**Union, S. C.**—The Monarch Cotton Mills will place in operation in their mills considerable new equipment for electrical drive including an 1875 kv-a. Curtis turbo-generator with 15 kw. turbo exciter and 14 kw. motor generator exciter set, a centrifugal condenser, three 50 k-v-a. transformers, thirty-seven motors ranging from 2 hp. to 100 hp., switchboard and accessories. All this apparatus has been purchased from the General Electrical Co.

**Anderson, S. C.**—S. Saricannas, silk manufacturer, now located below Augusta, Ga., who has been in the city for several days in connection with opening up a small factory here, stated at the offices of the Chamber of Commerce that he expected to perfect arrangements in the next few days by which he will secure land on which to cultivate the silk worm, but that in the meantime he would move his factory here and import silk until such time as his trees which he will plant will be ready to produce the raw silk, which will sometime next year.

Mr. Saricannas is formerly from the silk growing section of Armenia in European Turkey and has had many years experience in the manufacture of silk. The factory to be located here will manufacture ornamental silks only, it is understood.

**Lexington, N. C.**—The Erlanger Cotton Mills will install a large amount of electrical apparatus for

## Knitting Mill For Sale

For Sale: A valuable up-to-date knitting mill property, consisting of mill, lot, and buildings, machinery, engines, boilers, sprinkler system, and water system, located in the City of Williamsburg.

For further information, apply to Norvell L. Henley, Trustee Williamsburg, Virginia, Thomas A. Williams, Trustee in Bankruptcy, Richmond, Virginia.



direct drive including an 1875 kv-a. Curtis turbo-generator with 15 kw. turbo exciter, 1800 kw. motor-generator set, three 25 kv-a. transformers, switchboard and accessories in the power plant. Throughout the mills over 800 motors will be employed comprising 680 small motors, 50 motors of 5 hp., 50 of 7 1-2 hp. and 42 motors of various sizes ranging from 3 to 50 hp., necessary switches, etc. The complete electrical equipment has been ordered from the General Electric Company.

It is now thought that the Er-langer Mills will begin operations about January 1st.

**Greenville, S. C.**—L. P. Hollis, welfare manager of the Parker Cotton Mills, recently made the following statement relative to the cotton used by the Parker Cotton Mills:

"The mills controlled by the Parker Cotton Mills Company consume annually approximately 70,000 bales of cotton, ranging in staple from one inch to an inch and 5-16, at cost about \$3,500,000.

"Victor No. 2, Apalache No. 2 and Capital City (Columbia) plants use approximately 5,000 bales of what is known as long staple cotton, ranging in length from 1 1-16 to 1 5-16, which during this season, brought from 15 to 20 cents per pound—amounting to, in round figures, \$400,000. The bulk of this cotton comes from our own state, the remainder from Mississippi.

"Olympia (Columbia), Wylie No. 1, Greer and Monaghan plants use approximately 25,000 bales of what is known as an extra staple cotton, ranging from full 1 1-16 to 1 1-8, which usually brings about one to one and one-quarter cents premium over our ordinary upland cotton and costs in the neighborhood of \$1,300,000. This cotton comes principally from Mississippi, Texas and Oklahoma, with a small percentage from this state. The staple of this cotton is very little, if any better, than a good percentage of the cotton grown north of the main line of the Southern Railway from Spartanburg to the Georgia line, but it is heavier-bodied and of stronger fibre, and therefore has a better breaking strength, which means better production.

"The remaining nine mills use approximately 40,000 bales of Upper Carolina, North Georgia and Alabama cotton, which runs 1 to 1 1-16 inch in staple, and costs about \$2,000,000.

"The grade used by all the mills is about average strict middling, with the exception of Apalache No. 1, where low grades are used in making heavy goods, such as osnaburges."

**Textile Institute Will Open Soon.**

D. E. Camak, president of the



## Speaking of Humidifier Repairs

We believe in making a thing to sell so that it doesn't need much attention; but when that attention is needed it will not be dreaded by complicated mechanism.

### THE TURBO HUMIDIFIER

is made to wear—and easy to repair. I saw a green man who had never seen the Turbo system before get up on a step ladder, remove and replace a head in less than four minutes.

Further, we do not make our money in repair parts. We can't. There are too few needed.

Get Turbofied—and satisfied.

**THE G. M. PARKS CO.**  
FITCHBURG, MASS.

Southern Office, No. 32 West Trade St., Charlotte, N. C.

B. S. COTTELL, Manager

Textile Industrial Institute at Spartanburg, S. C., is expecting an unusually auspicious opening of the school on Tuesday morning, September 23. He feels sure that the enrollment will be considerably larger than at any time during the past two years, as many students have notified him of their desire to return to the school and numerous applications have been received from others who wish to enroll in the institution. Until the new \$30,000 dormitory building is completed the school's sessions will be conducted in comfortable and spacious quarters secured from the Saxon Mills, and which are located in close proximity to the T. I. I. grounds.

### David-Brown Co. Rushed With Orders.

The David Brown Co., of Lawrence, Mass., manufacturers of bobbins, spools and shuttles, recently sent notices to their customers that they would close their plant for their annual vacation from August 16 to September 2. However, they found that on account of increase in business during the past few weeks that they will be compelled to run until August 22 and the vacation will begin with that date and extend to September 2.

### Welfare Workers to Meet.

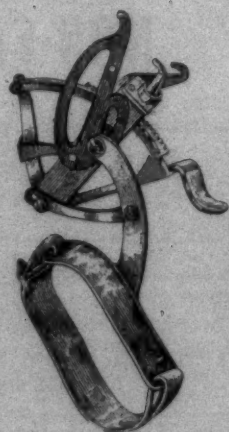
Workers in the welfare department of the Parker Cotton Mills Company, representing the sixteen mills of this corporation, will gather in Greenville on the 15th and 16th of September, to participate in a welfare conference. The meeting will be held at Monaghan Mill. The program for the gathering will probably be announced in the next few days by L. P. Hollis, who is at the head of this feature of the Parker Cotton Mill Company's work.

Information from Columbia is to the effect that Prof. W. K. Tate, supervisor of elementary schools, and president of the conference for the common good, recently held in Columbia, will attend the meeting of the welfare workers.

The meeting will be composed of the Y. M. C. A. and Y. W. C. A. secretaries, school teachers, kindergarten teachers, nurses, domestic science workers and others engaged in this work, among the sixteen cotton mills throughout the state which compose the Parker Cotton Mills Company. Matters of interest and significance in connection with this work will be discussed.

## The Byrd Knotter

Price \$20.00



Simple of Operation  
Durability Guaranteed

Small Repair Cost

**Byrd Manufacturing Co.**  
DURHAM, N. C.

## AMERICAN MOISTENING COMPANY

BOSTON, MASSACHUSETTS

WILLIAM FIRTH, President

FRANK B. COMINS, Vice-Pres. & Treas.

**THE ONLY PERFECT SYSTEM OF AIR MOISTENING**  
COMINS SECTIONAL HUMIDIFIER

JOHN HILL Southern Representative, Third Nat. Bank Building, ATLANTA, GEORGIA



## Cotton Goods Report

New York, N. Y.—Business in the cotton goods market last week progressed steadily but quietly from day to day, mostly for immediate and nearby requirements. Bleached goods were firmly held, in fact in some lines slight advances have been named. Wide pepperell sheeting for forward delivery have been marked up about five per cent, showing that the market in these goods is well sold up. Brown goods were steady and failed to show any further soft spots.

During the last few weeks, the gray goods market has had a slump in the prices of standard constructions and cloths have been let out at lower prices. However, toward the latter part of last week there was a tendency toward more firmness in prices. Mills are asking advances of a sixteenth of a cent over the recent low levels, and in some cases it is hard to secure additional supplies at the former levels. There are still many buyers in this market and fall orders are being placed steadily on general fall lines. Dress goods have sold in satisfactory volume and Fall underwear and hosiery have also been placed in order to a considerable extent, causing jobbers to send further requests to manufacturers for quicker deliveries on dress good they have in order.

The spring season on cotton dress goods is slowly developing. There is no doubt that for the season ratines, crepes and voiles will be sold in large quantities, but the opinion is being expressed in the market that there are now a number of fabrics being shown which have reached the height of popularity as far as exclusive cotton fabrics are concerned. Ratines, it is said, are being overdone, and jacquards are being too freely shown through the market to take well with consumers who want a high grade cotton cloths out of the ordinary run. Crepes are almost a staple fabric and are carried from year to year by a number of houses.

While the Fall River print cloth market was considered quiet, with only moderate sales, brokers found the tone better and conditions generally a little steadier than last week. Buyers showed some interest in several styles and endeavored to secure these goods at concessions. Manufacturers refused to consider offers below quotations, however, and it seemed evident that rock bottom prices have been reached. In many cases buyers appeared very indifferent, and withdrew from the market upon ascertaining that the mill men were determined in their position not to go lower. Sales seemed equally divided on the narrow and wide styles, although not heavy in any case. Contracts were not bought except in rare instances, and goods were sold for spot or very nearby deliveries.

Manufacturers were encouraged

by the appearance of the representatives of the American Printing Co. in the market, especially in view of the fact that the mills are to resume shortly. They feel sure that buyers must soon begin to figure ahead, rather than continue along the hand-to-mouth policy followed now for such a long period. Goods disposed of during the last month have no more than moved along the weekly production.

Quotations for the week are unchanged from last week.

Prices on cotton goods were quoted in New York as follows:

Prt elths, 28-in, std 3 5-8	—
28 1-2-in, std . . . . . 3 1-2	—
4-yard, 80x80s . . . . . 6 7-8	—
Gray good s, 39-in, 68	
x72s . . . . . 5 1-4 to 5 3-8	
38 1-2-in, std . . . . . 4 7-8	—
Brown drills, std. . . . . 8	—
Sheetings, South-	
ern std. . . . . 7 3-4	—
3-yard . . . . . 7	to 7 1-2
4-yard, 56x60s . . . . . 5 7-8	to 6
Denims, 9-oz. . . . . 14	to 17
Stark, 8-oz. duck . . . . . 14	—
Hartford, 11-oz., 40-	
in. duck . . . . . 16 1-8	—
Tickings, 8-oz. . . . . 13 1-4	—
Std fancy print . . . . . 5 1-2	—
Standard gingham 6 1-4	—
Fine dress gingham 7 1-2 to 9 1-4	
Kid fin. cambrics . . . . . 4 1-4 to 4 1-2	

### Weekly Visible Supply of American Cotton.

August 15, 1913 . . . . .	1,049,576
Last week . . . . .	1,154,582
Same date last year . . . . .	1,335,676

### Weekly Cotton Statistics.

New York, Aug. 15.—The following statistics on the movement of cotton for the week ending Friday, Aug. 15, were compiled by the New York Cotton Exchange:

#### WEEKLY MOVEMENT.

1913.	
Port receipts . . . . .	24,798
Overland to mills and Canada . . . . .	3,666
Southern mill takings (estimated) . . . . .	10,000
Loss of stock at int. towns . . . . .	7,520
Brought into sight for the week . . . . .	30,944
TOTAL CROP MOVEMENT	
Port receipts . . . . .	9,837,553
Overland to mills and Canada . . . . .	995,764
Southern mill takings (estimated) . . . . .	2,750,000
Stock at interior owns in excess of Sept. 1 . . . . .	26,850

Brought into sight thus far for season . . . . . 13,610,167  
2,593 bales added to receipts for the season.

"Aren't you going to say your prayers, Willie?"

"No, I'm not. I'm tired of praying for this family without getting any results."—Ex.

## GRINNELL WILLIS & COMPANY

44-46 Leonard Street, New York

### SELLING AGENTS

BROWN AND BLEACHED COTTON GOODS FOR HOME EXPORT MARKETS

## RICHARD A. BLYTHE

(INCORPORATED)

Cotton Yarns Mercerized and Natural

ALL NUMBERS

505-506 Mariner and Merchant Building

PHILADELPHIA, PA.

## The Desirability of the South

as the place to manufacture cotton goods is illustrated in the increase of 67% quoted by census department. We can offer attractive situations for those desiring to enter this field.

## J. A. PRIDE

General Industrial Agent, Seaboard Air Line Railway

NORFOLK, VIRGINIA.

When you enjoy the economy of lubrication provided by



you discover that increased production means a great deal more than a slightly lower lubricant expense.

Figure out the saving involved in a 50% reduction of oil stains in your Carding, Twisting and Spinning. Then write us for test samples of NON-FLUID OIL for Comb-boxes, Roll Necks and Twister Rings.

SOLE MANUFACTURERS

New York & New Jersey Lubricant Co.

165 Broadway, NEW YORK

## BOSSON & LANE

—Manufacturers—

CASTOR OIL, SOLUBLE OIL, BLEACHING OIL, TURKEY RED OIL, SNOWFLAKE, SOLUBLE GREASE  
FLAXHORN, ALPHA SODA, OLEINE  
B. & L. ANTI-CHLORINE, SOLUBLE WAX  
BLEACHERS BLUES

Works and Office

Atlantic, Mass.



# The Yarn Market

Philadelphia, Pan. — The yarn market last week was quiet on the whole, in both divisions. Receipts of yarn from the South were moderate and deliveries on old contracts were good.

Makers of carded yarn hosiery are well sold up on production for the season. Several are reported as being sold through to May with some business running through to June and July, and one manufacturer is said to be sold up until next August. There is a good spot demand from hosiery manufacturers for yarns, one dealer saying that the demand was better than for any other month of August in 15 years. The prices for spot deliveries vary. The knitter who is in a hurry and must have yarn has to pay on the basis of 21 cents for 10s, while the knitter who is not in a hurry can buy for 20 1-2 cents. The demand for spot delivery is principally for 10s and 20s. There was some buying for future deliveries and sales were reported made on the basis of 19 cents for 10s out of new crop cotton.

A fair demand was reported by dealers for single combed yarn for both prompt and future delivery. Spinners, both in the South and East need business on combed yarns and as the result of the competition, prices are irregular. Sales of Southern frame spun 14s to 18s combed peeler cones were made on the basis of 25 cents for 10s. The demand for two-ply combed peeler was light. Some dealers say that there is practically no demand for 70-2 and 80-2 and the demand for 60-2 and coarser is not encouraging.

There is not much activity in the weaving lines and the well informed do not look for better conditions before the end of the month. The men's wear trade is an uncertain quantity. Dress goods are moving slowly.

## Southern Single Skeins.

4s to 8s	18	—
10s	18 1-2	19
12s	19	19 1-2
14s	20	—
16s	20 1-2	—
20s	21	—
24s	22 1-2	—
30s	23 1-2	24

## Southern Two-Ply Skeins:

8s	18	18 1-2
10s	18 1-2	19
12s	19	—
14s	20	—
16s	20	20 1-2
20s	21	21 1-2
24s	23	23 1-2
26s	23	23 1-2
30s	24	—
40s	29	29 1-2
50s	37 1-2	38
60s	48	—

## Carpet and Upholstery Yarn in Skeins:

9-4 slack	19	19 1-2
8-4 slack	19 1-2	20
8-3-4 hard twist	17	17 12

## Southern Single Warps:

8s	18 1-2	—
10s	19	—
12s	19 1-2	—
14s	20	—
16s	20 1-2	—
20s	21	—
16s	21	—
24s	22 1-2	—
30s	24	—

## Southern Two-Ply Warps:

8s	18 1-2	19
10s	19	19 1-2
12s	20	20 1-2
14s	21	—
16s	21 1-2	—
20s	21 1-2	22 1-2
24s	22	—
26s	23 1-2	—
30s	24	—
40s	29	29 1-2
50s	38	—

## Southern Frame Spun Yarn on Cones

8s	19	—
10s	19 1-2	20 1-2
12s	20	21
14s	20 1-2	21 1-2
16s	21 1-2	22
18s	22	22 1-2
20s	22 1-2	23
22s	22 1-2	23 1-2
24s	22 1-2	24
26s	24	24 1-2
30s	25	26

## Two-Ply Carded Peeler in Skeins:

20s	25	—
22s	25 1-2	—
24s	26	—
30s	27 1-2	—
36s	34	—
40s	31	31 1-2
50s	40	41
60s	49	50

## Single Combed Peeler Skeins:

20s	27 1-2	28
24s	29	—
30s	32 1-2	33
40s	37	38
50s	42	44
60s	52	54

## Two-Ply Combed Peeler Skeins:

20s	28	28 1-2
24s	30	—
30s	33	—
40s	38	39
50s	42	45
60s	51	53
70s	60	62
80s	70	83

# A. M. Law & Co. F. C. Abbott & Co

Spartanburg, S. C.

Charlotte, N. C.

BROKERS

BROKERS

Dealers in Mill Stocks and other Southern Securities

Southern Mill Stocks, Bank Stocks

N. C. State Bonds, N. C. Rail-

road Stock and Other High

Grade Securities

South Carolina and Georgia Mill Stocks.

	Bid	Asked
Abbeville Cot. M., S. C.	100	100
Aiken Mfg. Co., S. C.	35	—
Amer. Spinning Co., S. C.	154	—
Anderson C. M., S. C., pf	90	—
Aragon Mills, S. C.	65	—
Arcadia Mills, S. C.	91	—
Arkwright Mills, S. C.	100	—
Augusta Factory, Ga.	35	—
Avondale Mills, Ala.	115	120
Belton Cot. Mills, S. C.	100	—
Brandon Mill, S. C.	75	—
Brogan Mills, S. C.	61	—
Calhoun Mills, S. C.	51	—
Capital Cot. Mills, S. C.	85	—
Chiquola, S. C., com.	100	—
Clifton Mfg. Co., S. C.	101	—
Clifton Mfg. Co., S. C., pf	100	—
Clifton Cot. Mills, S. C.	125	—
Courtenay Mfg. Co., S. C.	90	—
Columbus Mfg. Co., Ga.	92 1/2	100
Cox Mfg. Co., S. C.	100	—
D. E. Converse Co., S. C.	85	—
Dallas Mfg. Co., Ala.	110	—
Darlington Mfg. Co., S.	—	65
Drayton Mills, S. C.	50	—
Eague & Phenix Mill, Ga.	80	90
Easley Mill, S. C.	180	—
Enoree Mfg. Co., S. C.	25	50
Enoree Mfg. Co., S. C., preferred	—	100
Enterprise Mfg. Co., Ga.	65	70
Exposition Mill, Ga.	150	—
Fairfield C. Mills, S. C.	70	—
Gaffney Mfg. Co., S. C.	85	—
Gainesville Cotton Mills, Ga., common	80	—
Glenwood Mills, S. C.	141	—
Glenn-Lowry Mfg. Co., S. C.	101	—
Glenn-Lowry Mfg. Co., S. C., preferred	—	86
Gluck Mills, S. C.	80	—
Granby Cot. Mills, S. C.	—	—
Granby C. M., S. C., pf.	—	—
Graniteville Mfg. Co., S.	140	145
Grendel Mill, S. C.	100	—
Hamrick Mills, S. C.	102	—
Hartsville C. M., S. C.	170	—
Inman Mills, S. C.	105	—
Inman Mills, S. C., pf.	100	—
Jackson Mills, S. C.	95	—
King, John P. Mfg. Co., Ga.	80	86
Lancaster C. Mills, S. C.	130	—
Lancaster C. Mills, S. C., preferred	97	—
Langley Mfg. Co., S. C.	70	75
Laurens Mill, S. C.	15	—
Limestone Mill, S. C.	125	133
Lockhart	40	—
Marlboro Mills, S. C.	60	75
Mills Mfg. Co., S. C.	110	—
Mollohon Mfg. Co., S. C.	90	—
Monarch Mill, S. C.	115	—
Monaghan Mills, S. C.	—	—
Newberry C. Mills, S. C.	135	140
Ninety-Six Mills, S. C.	135	—
Norris C. Mills, S. C.	102	—
Orangeburg Mfg. Co., S.	—	90

## North Carolina Mill Stocks.

	Bid	Asked
Arista	—	—
Arlington	141	—
Avon	—	—
Brown, pfd	100	—
Cannon	151	—
Cabarrus	150	—
Chadwick-Hoskins, pfd.	100	—
Chadwick-Hoskins, com	85	—
Chronicle	160	—
Cliffside	190	195
Efird, N. C.	115	121
Erwin, com	150	—
Erwin, pfd	103	—
Gibson	107 1/2	105
Gray Mf. Co.	117	120
Highland Park	191 1/2	200
Highland Park, pfd.	102	—
Imperial	133 1-3	—
Kesler	165	—
Loray Mills, pfd.	95	—
Loray, com	40	—
Lowell	181	—
Majestic	150	—
Patterson	125	—
Washington Mills	10	—
Washington Mills, pfd.	100	—
Wiscassett	135	150
Olympia Mills, S. C., pfd	—	—
Parker Cotton Mills, guaranteed	100	100 & int
Parker, pfd.	40	45
Common	16	20
Orr Cotton Mills	92 1/2	—
Ottaray Mills, S. C.	100	—
Oconee Mills, common.	100	—
Oconee Mills, pfd.	100 & in.	—
Pacolet Mfg. Co., S. C.	101	—
Pacolet Mfg. Co., pfd.	100 & in.	—
Parker Mills, pfd	40	—
Pelzer Mfg. Co., S. C.	135	—
Pickens C. Mills, S. C.	100	—
Piedmont Mfg. Co., S. C.	144	160
Poe F. W.) Mfg. Co., S.	105	115
Richland C. M., S. C., pf	—	—
Riverside Mills, S. C.	25	—
Roanoke Mills, S. C.	140	160
Saxon Mill, S. C.	126	—
Sibley Mfg. Co., Ga.	64	—
Spartan Mill, S. C.	110	112
Tucapau Mill, S. C.	280	—
Toxaway Mills, S. C.	72	—
Union-Buffalo, 1st pfd.	35	40
Union-Buffalo Mills, S.	—	—
2nd pfd.	10	—
Victor Mfg. Co., S. C.	—	—
Ware Shoals Mfg. Co., S.	—	—
C.	75	—
Warren Mfg. Co., S. C.	80	85
Warren Mfg. Co., pfd.	100	—
Watts Mills, S. C.	38	60
Williamston Mill, S. C.	97	—
Woodruff C. Mills, S. C.	95	—
Woodside C. Mills, S. C.	—	—



## Personal Items

C. H. Lockman has resigned as overseer of weaving at the Merrimack Mills, Huntsville, Ala.

Pat Fears has resigned as overseer of weaving at the Dallas Mfg. Co., Huntsville, Ala.

Frank Hammond has resigned as president of the Westervelt Mills, Greenville, S. C.

J. A. McFalls, of Newton, N. C., has accepted the position of superintendent of the Fitzgerald (Ga.) Cotton Mills.

H. A. Childers, of Capelsie, N. C., has accepted a position in the spinning room of the Chadwick Hoskins Mill No. 4, Charlotte, N. C.

G. T. Lashley has resigned as overseer of carding and spinning at the Pilot Mills, Raleigh, N. C., and accepted a similar position at the Aurora Mills, Burlington, N. C.

J. F. Clark, formerly superintendent of the Martel Mfg. Co., East Point, Ga., has become general manager of the Lauderdale Mills, Meridian, Miss.

W. B. Whitmire has resigned his position as second hand in carding at the Massachusetts Mills, Lindale, Ga., to become overseer of carding at Trion, Ga.

Fred L. Still, son of B. L. Still, overseer of carding at the Lancaster (S. C.) Cotton Mills, has been on a visit to Greenwood, S. C., and Clemson College. He will enter Clemson College in September.

### Silk Farm at Anderson.

It will be necessary to transplant 5,000 silk trees in order to get the silk farm located as proposed at Anderson, S. C. These trees are all now on Mr. Asigian's farm, near Augusta, and he says it is his intention to transplant the entire 5,000 trees and bring them to Anderson, where they will be replanted as the basis for the silk factory which he contemplates putting in in that city.

### Cutting Affray at Girard.

Joe Abney, an employee of the Girard (Ala.) Cotton Mill, was seriously cut about the face and head, Sunday night, in an altercation with DeWitt T. Grant of Phenix City, the dispute having been about a small amount of money. The wounds are said to be of a serious nature.

### Winners Announced.

Prizes have been awarded to the contestants in the Modena Mill's pretty home contest at Gastonia, N. C. The prizes were given for the cleanest, prettiest and most sanitary premises. The first prize of \$5 in gold was given to Mr. and Mrs. Dave Gladden, Mr. and Mrs. J. B. Ham carried off the second prize, \$2.50, while the third prize, \$1.50 was awarded to Mr. and Mrs. J. F. Armstrong.

Those receiving honorable mention were: Mr. and Mrs. N. E. Davis, and Mrs. George Smith, Mr. and Mrs. J. B. Chaffin, Mr. and Mrs. J. L. Dellahay, Mrs. J. M. Seism, Mr. and Mrs. L. T. Long, Mr. and Mrs. John Queen, Mr. and Mrs. J. F. Galden, Mr. and Mrs. George Smith, Mr. and Mrs. J. L. Dellahay. This contest was announced in the early Spring and aroused a

considerable amount of interest. Mrs. J. O. White gave the prizes which were awarded.

### "Snake Charmer" is Bitten by a Pilot.

Will Thurmond, a well-known Lindale (Ga.) mill operative, who very often acts as a snake-chamer, catching live snakes and biting off the heads like the "wild girl" or "wild man" as the case may be, Saturday afternoon started out for a few hours pastime with the reptiles on the creek banks and before he proceeded but a short distance was bitten by a poisonous pilot snake.

Thurmond caught the reptile and held it in his hands, exhibiting it to a number of his friends, who were accompanying him, and was offering to bite its head off for two dollars. While holding the snake it succeeded in striking its captor on the left hand, sinking its teeth deep into the flesh, the reptile having to be removed by force.

For several hours the man suffered agony, but was later very much relieved after several hours treatment. The doctors say they cannot yet tell what the outcome of Thurmond's experience will be.

### Mysterious Murder.

What appears to have been a clear case of cold-blooded murder was brought to light at Chester, S. C., last week, when the dead body of George Pearson, an employee of the Wylie Mills was found upon the railroad tracks near the mill. Pearson's face was cut and his skull crushed by a blow from some heavy instrument.

An immediate investigation was started and in a house, recently occupied by two women who were ordered to leave the mill village, was found the room in which Pearson was believed to have been killed. The room was literally covered with blood and gore and a heavy piece of railroad iron also bloody, was found. It is thought to have been used to crush Pearson's skull.

The investigation is still being carried on and it is thought that a number of arrests will be made at an early date.

### Run Over by Auto.

Grace Waldron, a nine-year-old girl living in the Easley (S. C.) Mill village was struck by an automobile Sunday afternoon and is in a critical condition. The machine was being driven by J. P. Charles, of Greenville. The accident was unavoidable and in no way due to reckless driving.

### The Way It Looked.

At the Paris Grand Prix a little boy heard a man say to his father: "I never knew a woman yet who wouldn't jump almost out of her clothes if she saw a mouse."

At this the little boy said to his father: "Papa, have all these ladies here seen mice?"—Ex.

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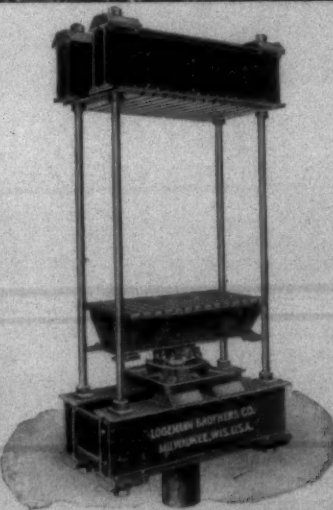
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A SOLUBLE GUM to be used in Warp Sizing. It is especially valuable as a binder, as it combines readily with any starches and holds the Size well on the yarn. We recommend this Gum especially where wires are in use. Besides making a smooth, pliable warp, users of Yorkshire Gum will find the threads split readily, and "break backs" are eliminated. While giving the very best results, it is, at the same time, a most economical Size. It also prevents foaming in the box. Should use Raw Tallow or Soluble Tallow in addition. Write for formula.

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# Want Department

## Want Advertisements.

If you are needing men for any position or have second hand machinery, etc., to sell, the want columns of the Southern Textile Bulletin afford a good medium for advertising the fact.

Advertisements placed with us reach all the mills.

## Employment Bureau.

The Employment Bureau is a feature of the Southern Textile Bulletin and we have better facilities for placing men in Southern mills than any other journal.

The cost of joining our employment bureau is only \$1.00 and there is no other cost unless a position is secured, in which case a reasonable fee is charged.

We do not guarantee to place every man who joins our employment bureau, but we do give them the best service of any employment bureau connected with the Southern textile industry.

## Help Wanted.

Wanted: At once complete set of help to start our new Mill Number 2. Includes hands for card room, spinning room and weave room. Cast your lot with us if you are looking for health, wealth and happiness. Apply promptly to W. C. Cobb, Supt. Ware Shoals Mfg. Company, Ware Shoals, S. C.

## Wanted

One card grinder and spinning and spooling help. Advantages and wages good.

H. L. Holden,  
Rocky Mount Mills,  
Rocky Mount, N. C.

## Wanted at Once.

Machinist at \$2.00 per day.  
Carpenter at \$1.75 per day.  
Watchman at \$10.50 per week.  
Shipping Clerk at \$2.00 per day.  
Must have mill help in family.  
Apply to J. B. Boyd, Supt. Patterson Mills Company, Roanoke Rapids, N. C.

## Wanted at Once.

I can use 2 or 3 families of fancy gingham weavers. My best weavers make from \$12 to \$14 per week. Apply to J. P. McCraw, Overseer Weaving Highland Park Mill No. 1, Charlotte, N. C.

## WANTED

Four first-class spindle plumbers in South Carolina. Only first-class spindle plumbers need apply. Pay \$2.00 per day. Address No. 1030, care Southern Textile Bulletin.

## HELP WANTED.

THREE TO FOUR FAMILIES WITH CARD ROOM, SPINNING ROOM AND WEAVE ROOM HELP. HEALTHY PLACE TO LIVE, AND CAN FURNISH STEADY EMPLOYMENT. FOR FURTHER INFORMATION APPLY TO

BEAVER DAM MILLS,  
EDGEFIELD, S. C.

WANT position as overseer of spinning and winding. 17 years experience in spinning and am now employed as overseer. Can furnish good references. Address No. 421.

WANT position as overseer of spinning. Have had long experience in first class mills and can furnish satisfactory references as to ability and character. Address No. 422.

WANT position as superintendent. Have long experience, both as overseer of spinning and as superintendent. Can furnish reference from previous employers. Prefer weaving mill. Address No. 423.

WANT position as overseer of cloth room or as overseer of weaving. Experienced in both rooms with special reference to colored and fancy goods. Now employed. Address No. 424.

WANT position as overseer of carding. 24 years experience in carding. Married. Sober. Good recommendations. Can change on short notice. Address No. 425.

WANT position as carder and spinner. Have had long experience and can furnish satisfactory references. Also experienced in overhauling. Address No. 426.

WANT position as overseer of spinning. 10 years experience. 6 years as overseer on carded and combed yarns, also hosiery and warp yarns. Married. Age 31. Strictly sober. Now employed. Can change on short notice. Address No. 427.

WANT position as carder. 24 years in card room. Now overseer. Age 38. Good manager of help. Married. Strictly sober. Can change on short notice. Good references. Address No. 428.

WANT position as overseer of spinning. Have long experience in good mills on both coarse and fine yarns. Can furnish satisfactory references. Address No. 429.

WANT position as superintendent. Have had experience running both small and large mills and can furnish fine references, both as to ability and character. Address No. 430.

WANT position as overseer of weaving, at not less than \$3.00 per day. Married. Of good character and temperate. Experienced on plain and check work. Have held present position two years. Can furnish references. Address No. 431.

WANT position as superintendent. Have had long experience both as carder and superintendent and can furnish splendid references. Have special reputation as expert carder. Address No. 432.

WANT position as overseer of spinning. Now employed but wish larger job. Have always made good and can furnish references from present and former employers. Address No. 433.

WANT position as overseer of carding or superintendent in a small mill. 18 years experience. Age 37. Sober. Married. Can furnish good references. Employed but can come on short notice. Address No. 434.

WANT position as superintendent. Now employed and can give present employers as reference. Long experience both as overseer and superintendent. Address No. 435.

WANT position as carder or carder and spinner. Have had good experience in both position on from 4's to 40's. Also have family of mill help. Strictly sober. Good references. Address 436.

WANT position as overseer of carding and spinning. 4 years experience in card room. 13 years experience as overseer of spinning. Good reason for wanting to change. Good references. Address No. 437.

WANT position as superintendent. Age 32. Have been in mill since a boy. Am practical carder, spinner and weaver. Now employed as superintendent but wish to change. Sober. Industrious. Good references. Address No. 438.

WANT position as overseer of spinning or carding and spinning. Experienced on 4's to 60's both combed and carded. Also hosiery yarns. Now employed in mill of 18,000 spindles and can give present employers as reference. Address No. 439.

WANT position as overseer of weaving. Now employed as second hand on Draper looms. 8 years experience in fixing on plain and fancy weaves. Best of references from present and past employers. Held present position 2 years. No. 440.

WANT position as superintendent. Now employed in small mill but desire larger mill. Have had long experience as overseer of carding and superintendent. Good references. Address No. 441.

WANT position as superintendent of small mill or large weave room. Now employed as superintendent but want larger mill. Have had long experience and can furnish

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best of references. Address No. 442.

WANT position as overseer of spinning or carding and spinning 10 years as carder and spinner. Sober. Reliable. Now employed but can change on short notice. Good references. Address No. 443.

WANT position as carder and spinner or both. Married. Sober. Reliable. Have had good experience and can give satisfaction. Address No. 444.

WANT position as overseer of weaving. 23 years experience. Have run large rooms in S. C. Age 45. Good references. Prefer room with Draper looms. Address No. 445.

WANT position as overseer of spinning or spinning, twisting, warping and winding. 7 years experience as overseer on 10's to 50's. 29 years old. Good habits. Good references. Can handle any size room. Now employed but can change on short notice. Address No. 446.

WANT position as overseer of weaving. Now employed and giving satisfaction, but wish to change for good reasons. Can give present and former employers as reference. Address No. 447.

WANT position as overseer of carding. Now employed, but wish a better place. Have had seven years' experience as overseer of carding and can furnish best of references. Address No. 448.

WANT position as superintendent or manager. Fully competent and can come well recommended by past employers. 40 years old. Married. Temperate habits. Experience extends over a period of 20 years. Correspondence confidential. Address No. 449.

WANT position as superintendent or manager. Have had long experience, especially on colored goods, and can give satisfaction. Good references. Address No. 450.

WANT position as superintendent. Would accept traveling position for mill supplies. Now employed as superintendent, but prefer to change. Long experience and first-class references. Address No. 451.

(Continued on next page)



(Continued from last page)

WANT position as overseer of carding or superintendent. Held last position as overseer of carding 7 years and can give that mill as reference. Can get results. Address No. 452.

WANT position as overseer of carding or spinning or both at not less than \$3.50 or \$4.00 per day. Can furnish references from previous employers. Address No. 453.

WANT position as overseer of weaving. Prefer Draper, Stafford or plain looms. Experienced on duck drills, chambrays, dobby weaves etc. First class references. Now employed. Address No. 454.

WANT position as superintendent. Have had many years experience and can furnish first-class references from former employers. Sober, reliable and good manager of help. Address No. 455.

WANT position as overseer of spinning or weaving at not less than \$3.00 per day. Can furnish best of references for either place. Prefer North or South Carolina. Address No. 456.

WANT position as overseer of weaving at not less than \$3.00 per day. Now employed and have had long experience. Good references. Address No. 457.

WANT position as superintendent in either N. C. or S. C. Have had long experience and especially qualified on white and colored hosiery yarns. Good references. Address No. 458.

WANT position as superintendent of either yarn or cloth mill. Am an expert carder. Parties whose production is not up to standard in either quality or quantity would lose nothing by investigating. Possess character and educational qualifications. Address No. 459.

WANT position as superintendent of yarn mill or carder and spinner. 20 years' experience as overseer and superintendent. Good references. Address No. 460.

WANT position as superintendent. Especially experienced on jacquard and fancy goods, both white and colored. Also expert designer. Good references. Address No. 461.

WANT position as superintendent or overseer of carding in large mill. Now employed but want larger job. Experienced on both white and colored goods. Satisfactory references. Address No. 462.

WANT position as overseer of beaming, warping, slashing, etc. Am I. C. S. graduate for full cotton course. Have run several beaming rooms and am thoroughly practical. Good references. Address No. 464.

WANT position as carder in large mill or superintendent of small mill on hosiery yarns. Now employed and giving satisfaction but prefer to change. Good references. Address No. 465.

WANT position as overseer of carding in small mill or second hand in large mill at not less than \$2.25. Have had long experience and am now employed. Age 26. Married. Good references. Address No. 466.

WANT position as overseer of carding. Now employed in large mill but wish to change. Prefer fine goods mill. Can furnish best of references as to character and ability. Address No. 467.

WANT position as overseer of spinning or superintendent of yarn mill. Have held present job 6 years but have good reason for wanting to change. Age 42. Married. Sober. Good references. Address No. 468.

WANT position as overseer of spinning in medium size mill or second hand in large mill. Now employed as second hand in first-class mill and can furnish good references. Address No. 469.

WANT position as superintendent. Especially experienced on combed yarns, both coarse and fine. Have had long experience in first-class mills. Satisfactory references. Address No. 470.

WISH to correspond with managers of either white or colored mills that are contemplating a change of superintendents. Can give satisfactory references as to ability and character. Now employed as superintendent. Address No. 471.

WANT position as superintendent. Have had long experience on coarse work including blanket manufacturing. Now employed. Good references. Address No. 472.

WANT position as superintendent. Now employed and giving satisfaction, but desire larger mill. Can furnish best of references. Address No. 473.

WANTED—A New England man, 40 years of age, married, moral and strictly temperate, wants position as superintendent. 28 years hard, practical experience on nearly all grades of cotton goods. Plain, fancies, and lenos. White or colored. From 10s to 100s yarns. Practical mechanic, good carder, expert weaver and finisher. Textile graduate, excellent manager, organizer, efficiency expert, and live wire. 3 years' experience in the South; at present employed. Reason for wanting to change not salary, but an opportunity to demonstrate ability. In this day of keen competition and tariff reform YOU want the best man. Have you got HIM? Investigate. All correspondence strictly confidential. All references. Address No. 474.

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WANT position as designer or overseer of weaving or would accept second hand job in good mill with chance of promotion. Good references. Address No. 476.

WANT position as superintendent. Have had long experience on both hosiery and hard yarns. Married. Sober. Reliable. Can furnish good references. Address No. 477.

WANT position as superintendent or overseer of weaving. Have had long experience and am now employed, but prefer healthier location. Can furnish satisfactory references. Address No. 478.

WANT position as overseer of carding. 15 years as second hand and assistant overseer. Married. Strictly sober and can furnish references as to character and ability. Address No. 479.

WANT position as carder, spinner or superintendent by a practical mill man of 20 years' experience as overseer and superintendent. Can change on short notice. Good references. Address No. 480.

WANT position as overseer of spinning or as superintendent of small mill. 10 years experience as overseer. Married. Age 30. Strictly temperate. Can give good references. Address No. 481.

WANT position as superintendent or carder in large mill at not less than \$4.00. Have had long experience and can furnish first-class references. Address No. 482.

WANT position as overseer of weaving. Have had 15 years' experience in large mill and can give best of references. Sober. Good manager of help. Address No. 483.

WANT position as overseer of carding or combing. Especially experienced on combers. Would accept second hand position in large mill. Good references. Address No. 484.

WANT position as superintendent of small mill. Am practical mill man, experienced in carding, spinning, warping, twisting and

winding. Am a hustler for production. Best of references. Address No. 485.

WANT position as overseer of carding. Would accept position as second hand in large room. Have had good experience in first class mills and can furnish good references. Address No. 486.

WANT position as overseer of weaving. Have had experience on many lines of goods and can give satisfaction. Can get production. Good references. Address No. 487.

WANT position as overseer of weaving. Have had long experience and fancy weaving and am now employed. Can furnish satisfactory references. Address No. 488.

WANT position as overseer of carding. Have had long experience and can furnish satisfactory references. Experienced on both coarse and fine work. Address No. 489.

WANT position as overseer of carding. Have run large rooms in a first-class mill and given satisfaction. Can furnish best of references. Address No. 490.

WANT position as overseer of carding in small mill or second hand in large mill. Now employed, but prefer to change. Can furnish good references. Address No. 491.

WANT position as superintendent. Now employed and giving satisfaction but want larger mill. Have had wide experience and can furnish good references. Address No. 492.

WANT position as overseer of cloth room. Have 14 years experience on exports, domestics, sheetings, drills, fancies and sateens. Can furnish necessary references as to ability and character. Address No. 494.

WANT position as superintendent of yarn mill or carder and spinner. Now employed and giving satisfaction but want larger job. Good references. Address No. 495.

WANT position as overseer of spinning. Experienced on both fine and coarse numbers and can handle large room. Good experience and fine references. Address No. 496.



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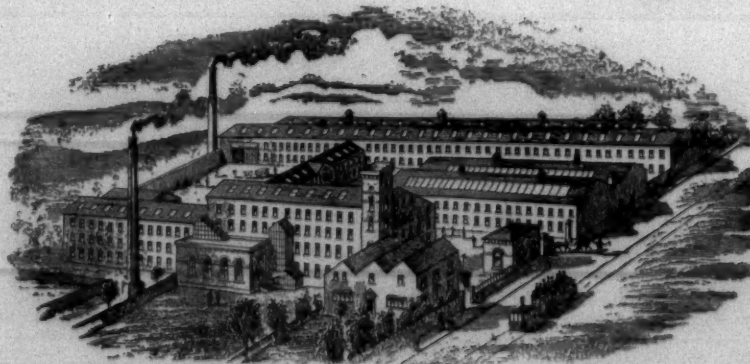
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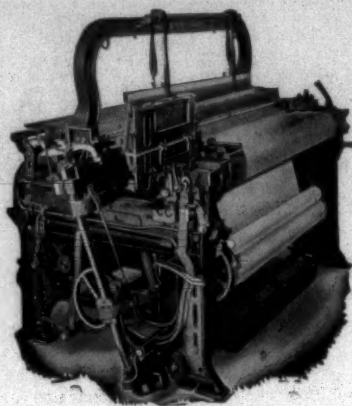
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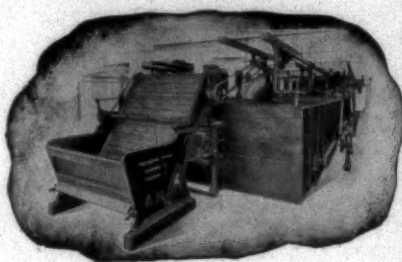
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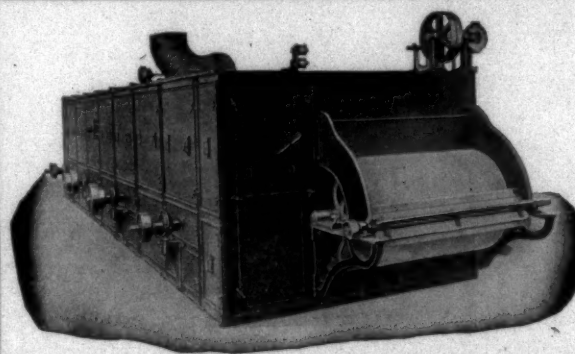


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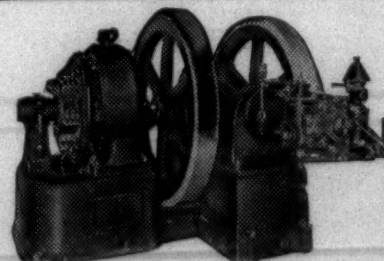
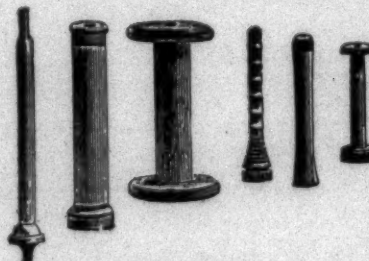
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